

Assignment

Date _____ Period _____

Solve each equation by taking square roots.

1) $4x^2 + 6 = 106$

2) $81n^2 - 10 = 90$

3) $6n^2 - 1 = 59$

4) $9r^2 - 2 = 727$

5) $9n^2 - 1 = 791$

6) $-10 - 2a^2 = -182$

7) $4r^2 + 3 = 327$

8) $2m^2 + 10 = 142$

9) $3x^2 - 2 = 187$

10) $7x^2 - 2 = 26$

Solve each equation by factoring.

11) $b^2 + 7 = 8b$

12) $b^2 + 36 = 12b$

13) $x^2 + 28 = -11x$

14) $x^2 - 30 = -x$

15) $n^2 + 6 = 7n$

16) $x^2 = 6x - 5$

17) $n^2 + 20 = 9n$

18) $x^2 - 5x = 14$

19) $p^2 - 3 = -2p$

20) $r^2 + 8 = 6r$

Solve each equation by completing the square.

21) $b^2 + 10b - 98 = -4$

22) $n^2 - 20n + 27 = -9$

23) $k^2 + 16k - 63 = 7$

24) $k^2 + 10k + 22 = -2$

25) $x^2 - 4x - 8 = 9$

26) $x^2 + 6x - 49 = 7$

27) $x^2 - 20x - 23 = -2$

28) $n^2 + 4n - 23 = 9$

29) $m^2 + 12m - 1 = -9$

30) $n^2 - 20n + 92 = 8$